# PROJECT DESCRIPTION

This project involves the modification of an existing Traffic Control Signal with street lighting at the intersection of MD 940 (Owings Mill Blvd) and Red Run Blvd in Baltimore County. A second left turn lane is being added to the east leg of Red Run Blvd. by Baltimore County, All work will be done by Baltimore County forces. MD 940 (Owings Mills Blvd) is assumed to run in a north - south direction.

#### II. INTERSECTION OPERATION

I. GENERAL

- The intersection shall continue to operate in a NEMA eight-phase, fully-actuated mode, with MD 940 (Owings Mill Blvd) approaches running concurrently. The Exclusive left turn phases for both approaches to MD 940 (Owings Mill Blvd) shall remain in operation. A new Countdown pedestrian phase with audible pushbutton actuation shall be provided across the south leg of MD 940 (Owings Mill Blvd). The Exclusive left turn phases for both approaches of Red Run Blvd shall remain in operation. The Red Run Blvd approaches shall also continue to run concurrently.
- 2. The existing full-traffic-actuated, eight-phase controller with video interface and all necessary equipment. housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.
- 3. There will be no changes to the signal operation with this revision.

#### III. SPECIAL NOTES

- 1. The Contractor shall be responsible for terminating all signal cables. to the appropriate terminals and shall properly label each cable.
- 2. All controller cabinet wiring will be performed by the S.H.A. Signal Shop, Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- 3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

4. APS will function as follows: FOR MD 940 (OWINGS MILLS BLVD)

- a When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be " Wait to cross Owings Mills Boulverard"
- b. When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

EMP-

The contact persons for District #4 are as follows:

ME-RONDON South WS. Evin Kuhu Assistant District Engineer – Traffic Phone: (410)<del>321–2781</del> ZZ9–238|

Mr. Stove Morciszewski Andre Futrell Assistant District Engineer - Maintenance Phone: (410) 321-276+ 229-2361

Mr. Michael Pasquariello District Engineer - Utility Phone: (410) <del>321-284</del> 229-234

Mr. Richard L. Daff. Sr. Chief. Traffic Operations Division Phone: (410) 787-7630

Mr. Ed Rodenhizer Signal Shop 410-787-7652

Mr. Sonny Bailey Sign Shop 410-787-7670

### EQUIPMENT LIST

EQUIPMENT TO BE SUPPLIED BY S.H.A..

DESCRIPTION QUANTITY Video Camera 1 EA

Coax Cable 250 LF

EQUIPMENT TO BE FURNISHED AND INSTALLED BY BALTIMORE COUNTY. DESCRIPTION

BALTIMORE COUNTY TO INSTALL EQUIPTMENT NOTED IN "A" AND F&I THE R3-5L SIGN. FAI 12" oneway, three section (RA, YA, GA) Signal

C. EQUIPMENT TO BE REMOVED

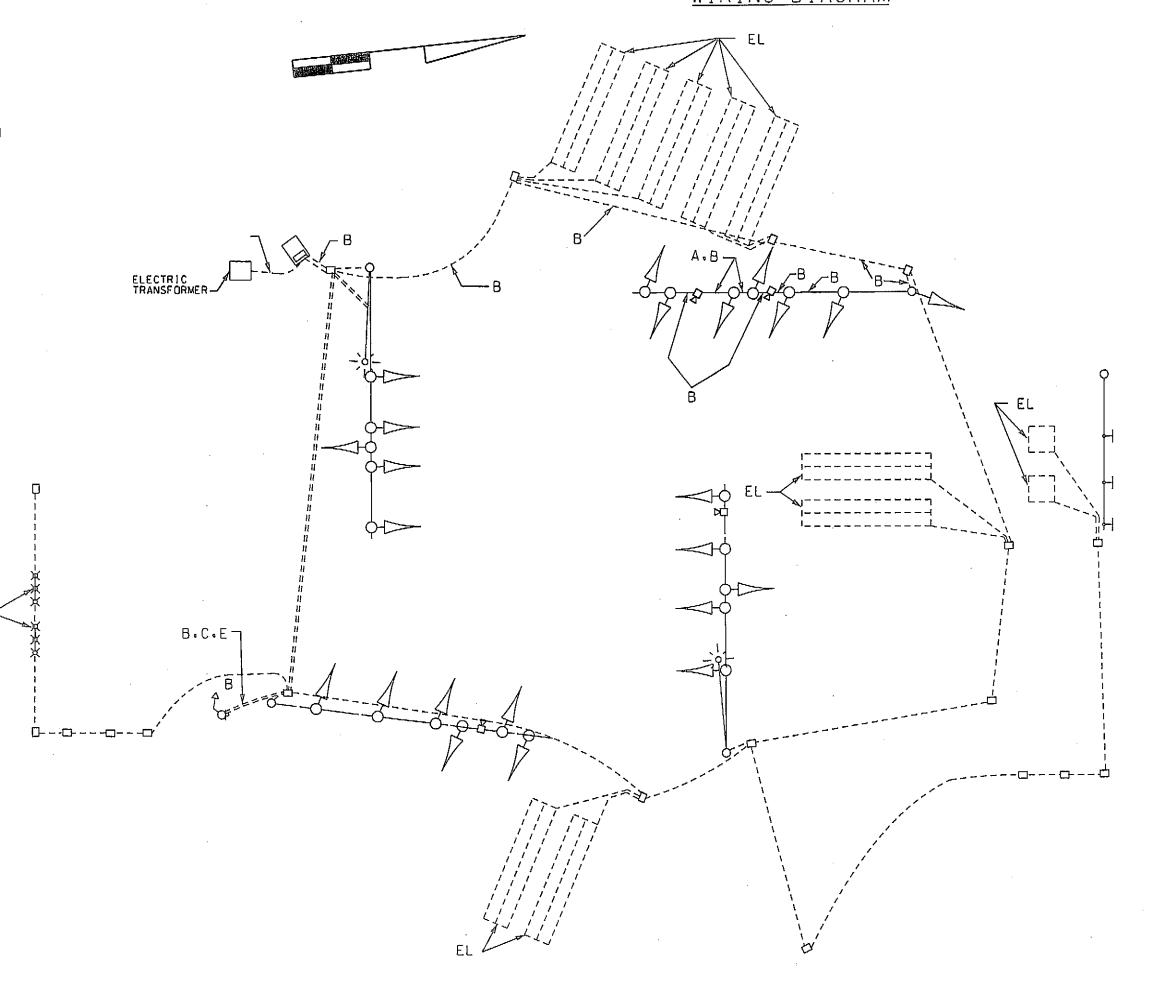
N/A

		<b>●</b> R→ <b>●</b> Y→ <b>●</b> G→	<b>4</b> R-) <b>4</b> Y-) <b>4</b> G-)	R Y G	RYG	<b>4</b> R→ <b>4</b> Y→ <b>4</b> G→	R Y T G	<b>Q</b> R→ <b>Q</b> Y→ <b>Q</b> G→	RYG	R	<b>4</b> R → <b>4</b> G →	R	<b>∢</b> R→ <b>∢</b> Y→ <b>∢</b> G→	<b>₹</b> ?	RYG	R Y G	AR AS AS	R Y G			R	R Y G	<b>#88</b>	<b>泽8</b> 8	
PHASE 1 & 5	<b>4</b> -G−	<b>4</b> -G−	<b>4</b> ~G−	R	R	<b>4</b> -6−	<b>4</b> -G−	<b>4</b> -G−	R	R	<b>-4</b> -R−	R	<b>⊲-</b> R−	<b>4</b> -R~	R	R	4-R-	R	<-R−	<b>4-</b> R−	R	R	DW	DW	<u></u>
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1 & 6 CHANGE	<b>4</b> - Y	<b>4</b> -Y−	<b>4</b> - Y−	G	G	<b>4</b> -R-	<b>4</b> -R~	<b>4</b> -R−	· R	R	<b>4</b> 1-R—	R	<b>⊴</b> -R−	<b>4</b> -R−	R	R	<-R-	R	4-R-	<b>4</b> -R−	R	R	DW	DW	]
PHASE 2 & 5	<b>4</b> -R−	<b>4</b> -R−	<b>4</b> -R−	R	R	<b>4</b> -G−	<b>4</b> -G—	<b>4</b> -G−	G	G	<b>4</b> -R−	R	<b>4</b> -R−	<b>∢</b> R-	R	R	<b>⊲</b> +R−	R	<-R-	<b>⊲-</b> R−	R	R	DW	DW	
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2 & 6 CHANGE	<b>4</b> -R−	<b>∢</b> -R−	<b>4</b> -R−	Y	Y	<b>4</b> -R–	<b>4</b> -R	<b>∢</b> -R–	Υ	Υ	<b>4-</b> R−	R	<b>∢</b> -R~-	<b>∢</b> -R~	R	R	<-R	R	<b>4-</b> R	<b>⊲-</b> R−	R	R	DW	D₩	
PHASE 3 & 7	<b>4</b> -R−	<b>4</b> -R-	<b>4</b> -R−	R	R	<b>∢</b> -R−	<b>4</b> -R~	<b>∢</b> -R−	R	R	<b>⋖</b> -G−	R	<b>4</b> -G−	<b>4</b> -G−	R	R	. <1-G-	R	<-G-	<b>4</b> -G−	R	R	DW	DW	<b>↓</b> ⊢
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PHASE 4 & 7	<b>4</b> -R−	<b>4</b> -R−	<b>4</b> -R−	R	R	<b>⋖</b> -R−	<b>4</b> -R−	<b>∢</b> -R−	R	R	<b>4</b> −G−	G	<b>4</b> -G−	<b>∢</b> -G−	G	G	<-R-	R	<b>4</b> -R−	<b>4</b> -R−	R	R	DW	DW	
4 & 7 CHANGE	<b>4</b> -R−	<b>∢</b> -R	<b>4</b> -R−	R	R	<b>⊲-</b> R–	<b>⋖</b> -R−	<b>4</b> -R−	R	R	<b>4</b> -Y−	G	<b>4</b> -Y−	<b>4</b> -Y−	G	G	<b>4</b> -R−	R	<b>4</b> -R−	<b>⊲</b> -R–	R	R	DW	DW	]-I
PHASE 4 & 8	<b>4</b> -R−	<b>4</b> -R−	<b>4</b> -R−	R	R	<b>4</b> -R−	<b>⊲</b> -R–	<b>4</b> -R−	R	R	<b>≪-</b> R−	G	<b>4</b> -R−	<b>⋖</b> -R_	G	G	<b>⊲-</b> R-	G	<-R	-R−</td <td>G</td> <td>G</td> <td>DW.</td> <td>DW</td> <td><u>^</u> ⊢</td>	G	G	DW.	DW	<u>^</u> ⊢
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4 & 7 ALT CHANGE	<b>4</b> -R−	<b>4</b> -R−	<b>4</b> -R−	R	R	<b>4</b> -R−	<b>∢</b> -R	<b>∢</b> -R−	R	R	<b>⊲</b> -Y–	G	<b>4</b> - Y−	<b>₫-</b> Y−	G	G	<b>⊲</b> -R–	R	<b>4-</b> R−	-R-</td <td>R</td> <td>R</td> <td>WK</td> <td>WK</td> <td></td>	R	R	WK	WK	
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PED CLEAR / COUNTDOWN	<b>4</b> -R−	<b>∢</b> -R	<b>4</b> -R−	R	R	<b>4</b> -R−	<b>4</b> -R−	<b>4</b> -R−	R	R	<b>4</b> -R−	G	<b>4</b> -R−	<b>4</b> -R−	G	G	<b>4-</b> R−	G	<-R-	<	G	G	FL/DW	FL/DW	
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FLASHING OPERATION	FL/ <b>∢</b> -R−	FL/ <b>4</b> -R−	FL/ <b>4</b> -R−	FL/Y	FL/Y	FL/ <b>∢</b> -R−	FL/ <b>⋖</b> -R−	FL/ <b>∢</b> -R−	FL/Y	FL/Y	FL/ <b>4</b> -R−	FL/R	FL/ <b>∢</b> -R−	FL/ <b>⊲</b> -R−	FL/R	FL/R	FL/∢-R-	FL/R	FL/ <b>∢</b> -R−	FL/∢-R	FL/R	FL/R	DARK	DARK	↓

PHASE CHART

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

WIRING DIAGRAM



## WIRING KEY

A - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G )

B - COAX CABLE

EMP-EXISTING NON-INVASIVE MICROLOOP EL-LOOP WIRE (NO. 14 A.W.G.)
EXISTING

ES-EXISTING UNDERGROUND SERVICE TO BE INSTALLED BY BGE

BW097M83 MD 940 @ red Run Boulevard



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

MD 940 (OWINGS MILLS BLVD) AND RED RUN BLVD

GENERAL INFORMATION SHEET

SCALE NONE DATE 11/18/2011 CONTRACT NO. 479365485

REVISION "O" BALTIMORE COUNTY T.E REVISION "C" Traffic Design Team Traific Engineering
And
Transportation & Planning
Baltimore County
Department of Public Vorta
County Office Building STREET TRAFFIC STUDIES, LTD.

400 Croin Hwy N.W. Glen Burnte MD 21061 Ph (410) 590-5500

CHECKED BY F.A.P. NO.

DESIGNED BY \_\_\_\_JWA

COUNTY BALTIMORE LOCMILE 03094000.00 TIMS NO. THE PARTY LZ39 TOD NO.

T-93 | TS NO. 3467♥ | DRAWING NO. 2 OF 2

SHEET NO. OF

410-887-3554 PLOTTED: \$DATETIME\$

11 W. Chesspeake Avenue, Room 3 Townon, Maryland 21204